Twin Screw Compressor Technology

Cutaway view shows the important elements of this highly productive screw compressor.

New Technology Giving You More from Less

**Higher specific output (BTU/CFM)**

Screw compressors outperform other types of compressors. A 65 CFM economized screw compressor will yield an improved 134% specific output over that of a 99 CFM reciprocating compressor. It will also occupy 37% less space and weigh 20% less.*

*Data based on actual test results of the Carlyle Compressor Division of the Carrier Corporation.

**Fewer moving parts**

By design and function, the screw compressor has fewer moving parts than the reciprocating style. Engineered with no valves or rolling element bearings, the total number of parts is drastically reduced as well. This reduction of parts is important because it dramatically improves the compressor’s reliability rate, increases the expected life-span, and reduces the maintenance factor.

**Less vibration**

Screw compressors are designed to be perfectly balanced and have no reciprocating motion present. This soft compression brings the vibration levels down to 1/30th of those found in comparable reciprocating compressors.*

*Data based on laboratory tests completed with a 30 HP Carlyle screw compressor and a 30 HP reciprocating compressor.

**Less refrigerant loss**

Screw compressor technology greatly reduces the risk of refrigerant loss because of the decrease in vibration within the entire system. Any structural breakdown within a refrigeration unit may cause loss of its valuable refrigerant. With the accelerating costs of R-22, R-134a and R-507/404A, product loss becomes an important operating factor.
We’re “putting the screws to your product” with our newest generation of environmental testing chambers and revolutionary twin screw compressor technology!

Now Envirotronics WP, ESS, EV, SV, ET & EH Series Environmental Test Chambers out-perform the competition with screw compressor technology.

Reciprocating compressors have, until now, carried the workload in applications requiring temperatures below -35°C. This was the technology of choice, mainly because cascading refrigeration systems were the only choice.

Now, Envirotronics has crossed another technological threshold and is excited to offer screw-style compressor systems. These systems were developed specifically for use in applications of -40°C and below (down to -50°C). Originally designed for larger applications, this technology is now available in chambers requiring only a single 15 HP compressor.

With the development of this advanced screw-style refrigeration system, we are able to pass along the following benefits to you:

- Better Performance per HP
- Improved Reliability
- Reduced Maintenance Costs

When your next purchase demands a low temperature range, down to -50°C, consider a screw compressor system, complete with all of these outstanding benefits!